

# Systems for Documentation

**Author:** Tobias Famulla

## Formats

- reStructuredText
- DocBook
- DITA
- LaTeX

### reStructuredText

- simple text documents
- lightweight markup language
- special but easy to learn syntax
- easy/naturally to read in the textform
- can easily be processed
- especially used in the Python-surrounding
- usable with normal text editors (e.g. vim, emacs)
- syntax-highlighting for some tools available

<http://en.wikipedia.org/wiki/ReStructuredText>

<http://docutils.sourceforge.net/rst.html>

### DocBook

- **XML-Document Type Definition**
  - in new version Relax NG schema used
- designed for technical documents
- has a lots of semantic elements
- Used by a lots of companies and projects
- books are available
- conversion with special stylesheets
- hierachially ordered

<http://en.wikipedia.org/wiki/DocBook>

<http://www.docbook.org/tgd5/en/html/docbook.html>

### DITA

- full name: Darwin Information Typing Architecture
- developed by IBM for their own documentation
- now OASIS standard
- XML-DTD available
- **topic-orientation**

- documents are made of pieces of topics
- single topics are written
- and then connected with a map files to different documents
- single-source publishing

[http://en.wikipedia.org/wiki/Darwin\\_Information\\_Typing\\_Architecture](http://en.wikipedia.org/wiki/Darwin_Information_Typing_Architecture)

## Main differences between formats

- reStructuredText(reST) and Docbook are more document/structure orientated, DITA is topic orientated
- DocBook and DITA are both XML-Files, reST a markup language
- DITA and Docbook are both OASIS standards

## Tools

### Creation of documents

#### *reStructuredText*

- The documents can be written by any texteditor

#### *Docbook*

- normal texteditors can be used (maybe uncomfortable)
- **XML-Editors can be used (for example)**
  - Syntext Serna XML editor (GPL and proprietary version available) <http://www.syntext.com/products/serna-free/>
  - <oXigen/> XML Editor (proprietary) <http://www.oxygenxml.com/>

#### *DITA*

- normal texteditors can be used
- XML-Editors like for Docbook can be used
- **special Authoring systems are available**
  - I did not find an open source one
  - PTC Arbortext <http://www.ptc.com/products/arbortext/>
  - XMetal Author <http://na.justsystems.com/content.php?page=xmetal-author-whats-new>
  - Adobe FrameMaker

### Conversion of documents in other formats

#### *reStructuredText*

- Sphinx <http://sphinx.pocoo.org/>
  - was made for the documentation of the Python-language
  - programmed in python

- active development
- converts to html, pdf, latex, QtHelp, Epub, manpages
- can be used with hooks in git or mercurial
- lightway and easy to use
- theming support
- **docutils** <http://docutils.sourceforge.net/>
  - tools for converting reST to different formats
  - used by Sphinx
- **rst2pdf** <http://code.google.com/p/rst2pdf/>
  - converts reST directly to PDF using CSS

## **DocBook**

- officially Docbook project <http://docbook.sourceforge.net/>
  - publishing using XSL Stylesheets
  - <http://en.wikipedia.org/wiki/XSLT>
- **dblatex**
  - to convert DocBook over LaTeX to PDF

## **DITA**

- DITA Open Toolkit
  - using XSL
  - converts to PDF, XHTML, RTF
  - <http://sourceforge.net/projects/dita-ot/>
  - <http://dita.xml.org/>
- Converters in commercial tools are often integrated

## **Converting the files to each other**

### **reST to Docbook**

- only db2rst available
  - <http://code.google.com/p/db2rst/>
  - small script
  - have maybe to be extended

### **Docbook to reST**

- pandoc can read reST and write Docbook
  - <http://johnmacfarlane.net/pandoc/>

## **Managing the files**

- All files can be managed with a Version Control System

- Because the huge amount of files using DITA-topics, a document management system might be the better way
- Maybe we could use the wiki, although the management of the document might be more difficult

## Things we have to do

- deciding which system we want to use
- maybe creating an oi-doc mailinglist
- define a workflow for documentation
- set up the software
- define a corporate-design
- write stylesheets
- convert the OpenSolaris documentation  
<http://hub.opensolaris.org/bin/view/Community+Group+documentation/>
  - SunDoc (Subset of DocBook)
  - Public Documentation Licence
  - remove Sun/Oracle trademarks
- find a person who maintains the documentation
- import the parts in the wiki
- write missing parts of the documentation
- translate the documentation